

THE SECRET

THE OFF  
BUDDINGES



The Center series is published by the Center for American Architecture and Design at the School of Architecture at The University of Texas at Austin. [soa.utexas.edu/caad](http://soa.utexas.edu/caad)

ISBN: 978-0-934951-28-9

Editors: Michael Benedikt, Kory Bieg

Series Editor: Michael Benedikt

Managing Editor: Leora Visotzky

Assistant Editors: Tatiana Baglioni, Andrea Becker

Design: Tenderling Design | [tenderling.com](http://tenderling.com)

Front and Back Cover Photos by Noah Winkler

*CENTER 21: The Secret Life of Buildings* is supported by The Hal Box Endowed Chair in Urbanism, The Center for American Architecture and Design Endowed Excellence Fund, and the Eugene and Margaret McDermott Excellence Fund for the Study of American Architecture.

Text © 2018 Center for American Architecture and Design

Printed in Canada, Friesens Corporation

# RESPONSE TO SCHUMACHER

GRAHAM HARMAN

Patrik Schumacher's intervention in this debate is warmly welcome. He is, of course, a preeminent designer whose work at Zaha Hadid Architects has helped produce some of the most memorable buildings of our time; this much is widely recognized by architects. He has also written one of the most ambitious theoretical works in any field in recent memory: the massive, two-volume book *The Autopoiesis of Architecture* (hereafter *Autopoiesis*).<sup>1</sup> Though I have found *Autopoiesis* to be more coldly received in the profession than Schumacher's actual design work, I admire the former as well, and as a newcomer to the field have learned a great deal from it. Lucid in his passions and his dismissals, Schumacher has an endearing taste for intellectual risk, along with the rare willingness to take as many punches as he throws. No matter how many opponents assemble against him—often enough as a result of his own demand to dominate architecture as a whole—he will always have a place at my dinner table.

True to his blunt and judgmental style, Schumacher uses “A Critique of Object-Oriented Architecture” to suggest that my philosophy is not very original in architectural terms, and not even very original in philosophical terms. As concerns architecture, I will mostly parry his objections, and leave any detailed responses for now to my allies in the field. But it seems that Schumacher is too impatient when demanding that OOO should already have given rise to a new formal design language simply because five years have passed since he first paid notice to it. As concerns philosophy, I will have more definite things to say, since my views here are considerably more developed than they are about any adjoining fields. Schumacher is right to warn architects not to feel intimidated by any philosophical “master discourses,” and he seems to recognize that I have not tried to intimidate anyone; instead, I am pleased to have entered into dialogue with a profession having several advantages over my own, including a greater pace of innovation and a superior alertness to the social consequences of intellectual work. I also have the sense that Schumacher is well-read in philosophy and knows his way around its most important modern authors. Nonetheless, he makes a number of sweeping claims about the relation of OOO to other philosophies, many of them hasty or simply wrong. Let's begin with the philosophical part of the picture.

## 1 THE SUPPOSED PHILOSOPHICAL UNORIGINALITY OF OBJECT-ORIENTED ONTOLOGY

The most flattering aspect of Schumacher's otherwise critical treatment is that he repeatedly mentions me in the same breath as some very important figures, even if only to rank me as a derivative imitator: he begins with Derrida, Deleuze, Luhmann, and Latour (p. 71). Schumacher later describes philosophy, in inspiring fashion, as the meeting ground of professional philosophers (“Heidegger, Derrida, Deleuze, and Harman”) and radical innovators who have philosophical effects from within their more specialized domains (“Marx, Mach, Guattari, Maturana, Luhmann, and Latour”) (p. 75–76). I certainly agree with Schumacher that Marx, Mach, Guattari, Maturana, and Luhmann should be

taken seriously by philosophers, and in Latour's case I even wrote the first book that said so.<sup>2</sup> But problems are already visible with Schumacher's account of my philosophy. For instance, the brief inclusion of Heidegger on the list of professional philosophers above is one of only two mentions of the infamous German thinker in the entire piece. The other comes in footnote 31 (p. 81), where he wrongly states that the aim of my reading of Heidegger's tool-analysis is to point to the tool's "unknown qualities, affordances, and capacities, establishing new relations and effects that lie beyond the relations of the tool's ordinary use." As will be seen below, I do not think this is quite right. And given that OOO first emerged in the 1990s from my doctoral research on Heidegger, it is—at the very least—a historical distortion to claim the degree of identity between OOO and Deleuze that Schumacher does while neglecting Heidegger's place in the picture.

A bigger problem arises when Schumacher claims (p. 71) that I merely repeat the calls for "open-endedness" already found in Derrida, Deleuze, Luhmann, and Latour. In so doing, Schumacher completely overlooks the vast differences between these four important thinkers, as well as the difference of each from OOO. Especially glaring, coming from someone who admires Luhmann as much as Schumacher does, is the following phrase: "Niklas Luhmann and Bruno Latour when they emphasized systems/networks as crucial to event/object individuation." (p. 71) Through the mere act of breezily connecting the words "system" and "network" with a slash, Schumacher represses a difference that haunts the entire intellectual framework of his *Autopoiesis*. System and network are not the same, and are not necessarily even compatible. For although Luhmann and Latour are two important sociologists who—in my opinion as well as Schumacher's—also became great philosophers, it is striking how little attention the followers of each pay to the other. Latour's contempt for what he calls Luhmann's "disastrous biological model" is well known in his circle, and conversely, there is an old and credible anecdote about Luhmann once receiving a lecture by the young Latour in Bielefeld, Germany, with supreme coldness and hostility. It is not at all hard to see why these two would fail to appreciate each other. For Latour, relations between actors do not pose any special difficulty: although work is always needed to bring one actor into more articulate relations with another, there is no particular barrier to such relations. The thought of Luhmann starts from precisely the opposite intuition. Here, just as in the autopoietic biological theory of Humberto Maturana and Francisco Varela, communication between the interior of a system and its outer environment is in some sense impossible; the system aims not at relating to the outside, but at *homeostasis*, or the mere preservation of its current state.<sup>3</sup> This gives Luhmann's politics a more pessimistic cast than Latour's, since it follows from social systems theory that protest merely reinforces the logic of the existing system.<sup>4</sup> Even more famously, Luhmann holds that what communicates in society are *communications*, not individuals. Thus there is a real sense in which society is impermeable to normal individual activity: an idea that has no place in Latour's philosophy, who discounts any notion of "society" and recommends that we set ourselves straightaway to rearranging the individual actors in our environment. The true meaning of "autopoiesis," a term Schumacher borrows from Maturana and Varela by way of Luhmann, is as follows:

4 Graham Harman, *Bruno Latour: Reassembling the Political* (Cambridge, UK: Polity Press, 2014).

2 Graham Harman, *Prince of Networks: Bruno Latour and Metaphysics* (Melbourne: re.press, 2009).

3 Humbert R. Maturana & Francisco J. Varela, *The Autopoiesis of Cognition: The Realization of the Living* (Dordrecht, The Netherlands: D. Reidel Publishing, 1980).

1 Patrik Schumacher, *The Autopoiesis of Architecture: Volume 1, A New Framework for Architecture* (Chichester, UK: John Wiley & Sons, 2011); Patrik Schumacher, *The Autopoiesis of Architecture: Volume 2, A New Framework for Architecture* (Chichester, UK: John Wiley & Sons, 2012).

an individual produces and reproduces itself internally rather than with a view to its external environment, which remains beyond any *direct* access.<sup>5</sup> How can this crucial feature be missed by someone as well read in Luhmann as Schumacher himself? The reason it happens is because Schumacher succumbs to one of Luhmann's own limitations: his tendency to read the "operational closure" of autopoiesis primarily in *professional* terms. That is to say, Luhmann writes voluminously about the autopoietic or self-enclosed character of social systems such as art, the law, science, or business with respect to each other. But once we find ourselves *inside* any of these professional spheres, Luhmann sees no special problem with the communication between entities. And this is precisely how Schumacher frames his own *Autopoiesis* book: as an extension of Luhmann's professional demarcations to architecture, which Schumacher skillfully differentiates from art on one side and engineering on the other. But having argued (quite effectively) that architecture is a self-referential system that incorporates other disciplines only as indirect irritants, he seems to find communication between all elements *internal to architecture* to be so unproblematic that he even *defines* architecture as the framing of social communications. This is why I much prefer Levi Bryant's OOO reading of Luhmann to Schumacher's own, thorough and impressive though the latter may be.<sup>6</sup> It is one of the merits of OOO to have recognized that communication is deeply problematic between any two entities, including one building and another, not just between one urban human profession and another.

But let's come to the main point, which is the relationism that I reject and Schumacher endorses. His general strategy in negotiating this difference is to trivialize it, whether by claiming that relational thinkers like Latour already know that relations are not the whole story, or by admitting my anti-relational point but adding that Deleuze was there first. Now, Schumacher is well aware that I yield to no one in my admiration for Bruno Latour, a friend and debating partner for nearly two decades; indeed, it seems to me that Latour is the most significant intellectual of the present day. And Schumacher admits that I am "usually generous" in my readings of Latour (p. 71). Yet shortly thereafter he calls me "ungenerous" to Latour when I claim, using direct textual evidence, that Latour "allows objects no surplus of reality beyond whatever they modify, transform, perturb, or create." But here it is not a question of generosity, but simply of following the consequences of Latour's statements; I am not interested in what Latour, the well-rounded human being, is surely "aware of," but only in the points where his philosophy is either adequate or inadequate. And the fact remains that if you hold—like Latour—that all that exists are actors, and that actors are nothing more than whatever they transform, modify, perturb, or create, then you have defined a cosmos filled solely with actions or events, and no surplus held in reserve to explain the origin of future actions and events. Schumacher is clearly less interested in my supposed lack of generosity to an old friend than in defanging my argument about surplus by dismissing it as trivial. In his own words: "my hypothesis is that Latour would absorb Harman's reminder about an underlying, opaque, surprise-producing, surplus reality without the slightest resistance." (p. 71) I am not inclined to think much of Schumacher's "hypothesis," since I have had some half-dozen discussions with Latour over the years in which he rejected (rather heatedly, I might add) the OOO

idea of a withdrawn surplus beneath every action. Nor is this just a debating point of the “hair-splitting” type that Schumacher derides (p. 72). There are serious consequences to this view, and Latour consciously embraces them, as in his rather infamous claim that the Egyptian Pharaoh Ramses II could not have died of tuberculosis as Egyptologists hold, since tuberculosis had not been discovered at the time.<sup>7</sup> In other words, tuberculosis cannot exist until it is registered by the (human) social network. Latour also implicitly recognized the need for a surplus beyond relations in his two attempts (in 1998 and 2005) to introduce the notion of an unformatted “plasma” that lies beneath networks and is responsible for all changes in relational actors, a concept that all evidence suggests he has abandoned.<sup>8</sup> There is nothing “ungenerous” in noting how valuable ideas nonetheless sometimes lead to impossible consequences, and that these ideas are therefore in need of modification. Far from ungenerous, this sort of thing is the bread and butter of intellectual critique. Schumacher permits himself to try it with my own work, and this makes his call for “generosity” towards relationism somewhat hypocritical.

This brings us to the themes of the actual, the possible, and the relational. I have often noted that relational ontologies (such as Latour’s or Alfred North Whitehead’s) fall into the same predicament faced by the ancient Megarians, who claimed that a housebuilder is not a housebuilder unless he is building one at this very moment. Aristotle notes the difficulties with such a position, and this is what leads him to introduce his famous concept of potentiality, or *dynamis*.<sup>9</sup> His objections strike me as decisive, and for this reason I hold that Aristotle has *refuted* the Megarian position and its contemporary heirs. Rather than attempting a counterargument, Schumacher chooses to respond with the feeble irony of scare quotes: “[Harman] claims that...[relationism was] ‘refuted’ by Aristotle.” (p. 71) Here as usual, the scare quotes are unearned. Does Schumacher agree that Aristotle refutes the point, or doesn’t he? If not, as seems to be the case, then he ought to address my point directly rather than making fun of it while standing there empty-handed. But the curious thing is that at other times Schumacher seems to agree with Aristotle’s claim that the actual is not enough: for if it were, there would be no need for Deleuze’s notion of “the virtual,” which Schumacher claims OOO has (perhaps unwittingly) plagiarized. In other words, Schumacher is trying to have his cake and eat it too: demanding a relational ontology, which entails that nothing exists outside the currently actual, while also deferring to an ontology of the virtual that marks a permanent rebuke to the Megarian/Latourian claim that only the actual exists.

This brings us to Deleuze, who is in some ways the hero of Schumacher’s article even more than Luhmann. I happen to agree with Deleuze that there is an important problem with Aristotle’s concept of the potential, though I define this problem differently, and I believe more clearly. In OOO terms, the defect of potentiality is that it counters the present actuality of the Megarian housebuilder merely by pointing to some *future* actuality in his life: perhaps after he wakes up and returns to building the house. This is like saying that it’s wrong to call an acorn just an acorn, because someday the acorn might grow into an oak tree. In other words, potentiality denies that an entity consists solely of its relations here and now only because someday it could be in different relations. OOO’s

5 Niklas Luhmann, *Social Systems*, trans. J. Bednarz Jr. with D. Baecker (Stanford, CA: Stanford University Press, 1995).

6 Levi R. Bryant, *The Democracy of Objects* (Ann Arbor, MI: Open Humanities Press, 2011), pp. 137-174.

7 Bruno Latour, “On the Partial Existence of Existing and Non-Existing Objects,” in *Biographies of Scientific Objects*, ed. L. Daston (Chicago: University of Chicago Press, 2000), pp. 247-269.

8 Bruno Latour & Émilie Hermant, *Paris ville invisible* (Paris: Éditions la Découverte, 1998). Available in English at <http://www.bruno-latour.fr/virtual/index.html#;> Bruno Latour, *Reassembling the Social: An Introduction to Actor-Network Theory* (Oxford: Oxford University Press, 2005).

9 Aristotle, *Metaphysics*, trans. J. Sachs (Santa Fe, NM: Green Lion Press, 1999) Book Theta, Chapter 3.

complaint about this theory—let’s call it Aristotelian potentialism—is that the object is always more than any current or future relations in which it might become involved.

Schumacher himself admits that “Deleuze’s concept is difficult to pin down.” (p. 76) And the exemplary passage he selects from Deleuze to explain it is anything but lucid: “The possible and the virtual are...distinguished by the fact that one refers to the form of identity in the concept, whereas the other designates a pure multiplicity...which radically excludes the identical as a prior condition...”<sup>10</sup> Whether or not anyone understands this passage fully, I am quite sure that Schumacher does not, since the whole of his article shows that he interprets it in the sense of Aristotelian potentialism: the exact opposite of Deleuze’s theory, in which the virtual is real without being either actual or possible. Am I being “ungenerous” to Schumacher in saying so? Hardly, since he wrongly identifies OOO withdrawal with the Deleuzian virtual (thus denigrating the former’s originality) while identifying his own theory (and misidentifying Deleuze’s) as one in which surprises and unforeseen effects are enough to topple potentiality. But Aristotle already knew about surprise effects in reality, which is precisely why he tried to account for an acorn’s later development into an oak tree. The Deleuzian virtual has to be more than this, and OOO withdrawal is definitely more than this, since the point of reality is not just to surprise humans with a series of unending kaleidoscopic relations *with us*. One way to go beyond Schumacher’s surprisingly Aristotelian Deleuze would be to follow Manuel DeLanda and interpret the virtual as the structure of a phase-space, meaning that the virtual is not simply the sum total of positions a marble can occupy in a sink, but rather the unreachable attractor that governs all of those positions. By contrast, Schumacher behaves as if the virtual were nothing more than the sum total of the marble’s possible positions. But DeLanda openly rejects the notion that the virtual is about the capacities of something to interact with another, as in Schumacher’s claim that both OOO and Deleuze recognize “the versatility and fecundity of an object when it participates in new and unexpected assemblages. These are what reveal the object’s unexpected capacities.” (p. 75) And from a OOO standpoint DeLanda’s position must be rejected philosophically—even if it were deemed correct as a reading of Deleuze—since he wants to make the virtual both heterogeneous *and* continuous, which dodges the key philosophical question of how individuals can be individuals at all if they belong to a continuum.<sup>11</sup> To summarize, even while denigrating OOO withdrawal as a mere revival of the Deleuzian virtual, Schumacher misinterprets both in terms of his unacknowledged Aristotelian potentialism. All of Schumacher’s examples of the virtual are really just examples of the possible.

Though Schumacher is probably right that “richness in possibilities tends to come from, or correlate with, a high degree of virtuality,” (p. 80) he is wrong to identify the two. He is suspicious of any surplus that would not eventually cash out in terms of pragmatic success, hinting that OOO withdrawal is nothing more than a sort of vague uneasiness haunting all OOO design projects in precisely the same monotonous way. Here he falls into the same all-or-nothing trap that vitiates the German Idealist critique of Kant’s thing-in-itself: if the withdrawn object is not equivalent to some discernible social communication, then it is merely a vague and amorphous ghost about which nothing definite can be said. In this way,

Schumacher surprisingly misses the case of aesthetics. Consider a metaphor, such as Homer's recurrent "dawn with her finger-tips of rose." The withdrawal in this metaphor consists not just in the fact that we can always interpret it in numerous unexpected different ways, but in the fact that the metaphor is still something more than the sum total of *all possible* prose interpretations of it, just as the globe is always something more than all the various two-dimensional renderings of it, each of them necessarily a distortion. Nor is this "more" simply an empty otherness posited somewhere beyond determinate insight: the metaphor is beyond all discursive prose propositions, but it is not beyond all cognition. In the same fashion, the withdrawal of an object such as a building is not just "indeterminate" as Schumacher dismissively puts it; instead, it is something more than all of its social deployments, though not beyond all elucidation. If Schumacher thinks this is just empty talk, while still posing as a champion of Deleuze's virtual, then he is simply misreading Deleuze as a theorist of the many surprising pragmatics any given thing can have.

## 2 THE SUPPOSED ARCHITECTURAL INFERIORITY OF OBJECT-ORIENTED ONTOLOGY

There are moments in his article when Schumacher speaks highly of the work being done by faculty and students at my new employer, SCI-Arc, calling it "impressively coherent across a whole series of design studios," then offering even more detailed praise on three different counts (p. 77). He further identifies SCI-Arc architecture with OOO, which does me both *too much* and *too little* credit: too much because SCI-Arc was well along on its own stylistic trajectory before I ever set foot on campus, and too little because he assumes that whatever influence I might have at the school has already reached its maximal (and relatively fruitless) form in design terms. Schumacher notes that SCI-Arc designs tend to involve "rugged, nearly amorphous, enigmatic lumps with rich, agitated exterior articulations, and complex, convoluted, cavernous interiors." (p. 77) He goes on to argue that all of this was available in earlier architectural paradigms, but gives little reason to accept his implication that this is all that either SCI-Arc or OOO have to offer. There are important faculty at SCI-Arc who have either not drawn much water from the OOO well at all (Hernán Díaz Alonso) or whose work is even rather opposed to it (Benjamin Bratton). There is also Mark Foster Gage at Yale, not SCI-Arc, whom Schumacher cites briefly as a polemicist without noting the rather un-SCI-Arc-ish neo-Gothic flair of Gage's own recent work. Even among the OOO partisans at SCI-Arc, Schumacher focuses exclusively on Wiscombe, saying nothing for instance about David Ruy, the one who first brought OOO to the notice of architects.

This failure to differentiate could be forgiven as polemicist's license, were it not for the sweeping and contradictory nature of Schumacher's major claims. The "sweeping" part comes from his judgment that there is nothing in OOO architecture that was not foreseen by Schumacher's parametricism and its supposed predecessors. The "contradictory" part stems from the opposing claims made by the two halves of the Schumacher Janus-Head. We learn from one face of Janus that OOO's non-relational theory leads to an uninteresting vision of enigmatic, cavernous lumps: for "without being integrated into complex networks of determinacy, indeterminacy becomes gratuitous, chaotic,

10 Gilles Deleuze, *Difference and Repetition*, trans. P. Patton (New York: Columbia University Press, 1995).

11 For a more detailed critique of DeLanda's position, see Graham Harman, *Towards Speculative Realism: Essays and Lectures* (Winchester, UK: Zero Books, 2010) Chapter 10, "The Assemblage Theory of Society," pp. 170-198.

interminable, and thus ultimately meaningless...” (p. 88) Meanwhile, the other face of Janus concedes Gage’s point that Schumacher’s parameters “are constantly shifting, but ultimately known, interconnected, procedural and calculable,” (cited on p. 87) and Schumacher even admits that OOO could teach it something—if not that parametricism already knew it and chose for good reasons to de-emphasize it. It is on this basis that Schumacher, in his inimitable fashion, entertains the possibility of allowing OOO to exist as a subsidiary style beneath his own banner, made possible by the fact that OOO is merely “a re-injection of one of [parametricism’s] own lost moments.” (p. 89) In this way, Schumacher’s essay passes through *all three* of the stages that William James says greet any new theory of importance: (1) it is clearly wrong (“OOO is not a viable style”); (2) it is obvious and therefore trivial (“withdrawal is so broad a concept as to be useless”); (3) it is eventually realized to be so important that its opponents claim to have discovered it themselves (“OOO is one of parametricism’s own lost moments”).

Since this response is already longer than the editors would have wished, I will close with just a few more observations about the very real difference between OOO and parametricism in architectural terms. Above all, I object to the assertion found in Schumacher’s article as well as his book that architecture is a matter of “framing communications.” (p. 71) Earlier I explained why this is a misreading of Luhmann, who is in some ways more a theorist of the *impossibility* of communication than of its ubiquity. But it is no less obvious, even to a relative layman like me, that Schumacher’s definition misses architecture’s role in the creation of *non*-communicating spaces. After all, an edifice must exclude noise, potential intruders, most cars and trains, as well as excessive light, heat, and cold. In the days when Chicago was just a swampy onion field, it was possible to observe nearly every part of the field from every other. Yet the Chicago architectural avalanche of the past two centuries has completely changed this situation, replacing the continuous onion swamp with so many mutually opaque warehouses, offices, apartments, closets, cubicles, and tunnels that no one could visit them all even if invited to do so. Yes, any architectural space needs points of ingress and egress, and means for observing other nearby spaces. It does not follow that maximizing these apertures is always the right architectural strategy, though Schumacher claims so in his strange condemnation of “the literal opacity of the building’s envelope...[which] rather constrains the potential relational complexity and fertility of the project, as it contributes to its isolation.” (p. 81) If Schumacher means to say that a transparent or translucent building envelope always effectuates “the virtual” better than an opaque outer wall can do, then he is simply confusing “more relations” with “better relations,” which often happens as well in the writings of Latour. But it is hard to see why a transparent Washington Monument would be better than the current opaque version, and even harder to see why tombs, crypts, monasteries, steam baths, and love nests would be “more complex and fertile” if penetrable to the gaze of pedestrians rather than tactfully hidden from casual view. Here it is Schumacher, not the partisans of OOO, who is guilty of an overly literal application of his relational theory. This literal call for transparent building envelopes against OOO opacity makes it all the more puzzling when Schumacher wonders aloud

whether object-oriented design has so far “violate[d] any of parametricism’s ‘dogmas’ (vary, differentiate, correlate), or perpetrate[d] any of its ‘taboos’ (fixity, repetition, collage).” (p. 77). Schumacher’s answer to his own rhetorical question is “no,” which he takes to justify his mission to turn OOO into a sub-variant of his own, more encompassing theory. Yet we have already seen that he condemns OOO architecture’s use of opaque envelopes for flouting the principle of transparency, which means that OOO *has* apparently violated one of his taboos.

In fact, Mark Foster Gage, in his relentless assault on parametricism, quotes Schumacher on a number of other rules that OOO would not hesitate to transgress under the right circumstances: namely, that parametric designs have “no platonic, discrete figures with sharp outlines,” that they must “avoid familiar typologies, avoid platonic/hermetic objects, avoid clear-cut zones/territories, avoid repetition, avoid straight lines, avoid corners.”<sup>12</sup> To this list I would add Schumacher’s disarming admission that the parametric demand of smoothness makes it hard to know what to do with windows and doors: “the insertion of all the necessary apertures (windows and doors) within the research program of Folding/Parametricism—privileging seamlessness and the integration of skin and skeleton within a single structural surface—represents a formidable challenge to the ingenuity of the avant-garde designer [i.e., to Schumacher himself].”<sup>13</sup> While it is still too early to guess at the ultimate form of a mature OOO architecture, if one should ever come to pass, we can already “weed out” (p. 82) —as Schumacher demands—any approach that expects smoothness, continuous gradients, and a seamless integration with the environment. I see no architectural grounds for excluding sharp outlines, hermetic objects, and clear-cut zones and territories, and know full well that there are no philosophical grounds for it. Schumacher tells us that “the intensely embedded architectural objects that parametricism strives to create are better [than] OOO objects because they have more...virtuality. They have more surplus capacities to engage in new assemblages...[By contrast,] the gaps that separate and isolate buildings from each other...are obstacles to the discovery and garnering of future network synergies.” (p. 81) But this is like saying that all the wines in a cellar should be mixed in a single bowl, since their isolation in separate bottles poses “obstacles to the discovery and garnering of future network synergies.” As powerful as the notion of networks may be, it gives us nothing but a vague holistic mush if we fail to respect the autonomy of the network’s various independent elements. And speaking of the autonomy of independent elements, I would prefer that OOO and parametricism follow for now their separate and parallel paths, rather than have Schumacher denounce OOO as a mere research strand or attempt to enslave it as a mere sub-style of the parametric dogma. We would never dream of forcing all animals on earth to fight to the last survivor; I see little reason for an analogous premature duel to the death in architectural theory. ♦

13 Schumacher, *The Autopoiesis of Architecture*, Volume 1, p. 297.

12 Schumacher, as cited on page 130 of Mark Foster Gage, “A Hospice for Parametricism,” pp. 128–133, in *Parametricism 2.0: Rethinking Architecture’s Agenda for the 21st Century*, ed. P. Schumacher (London: John Wiley & Sons, 2016).